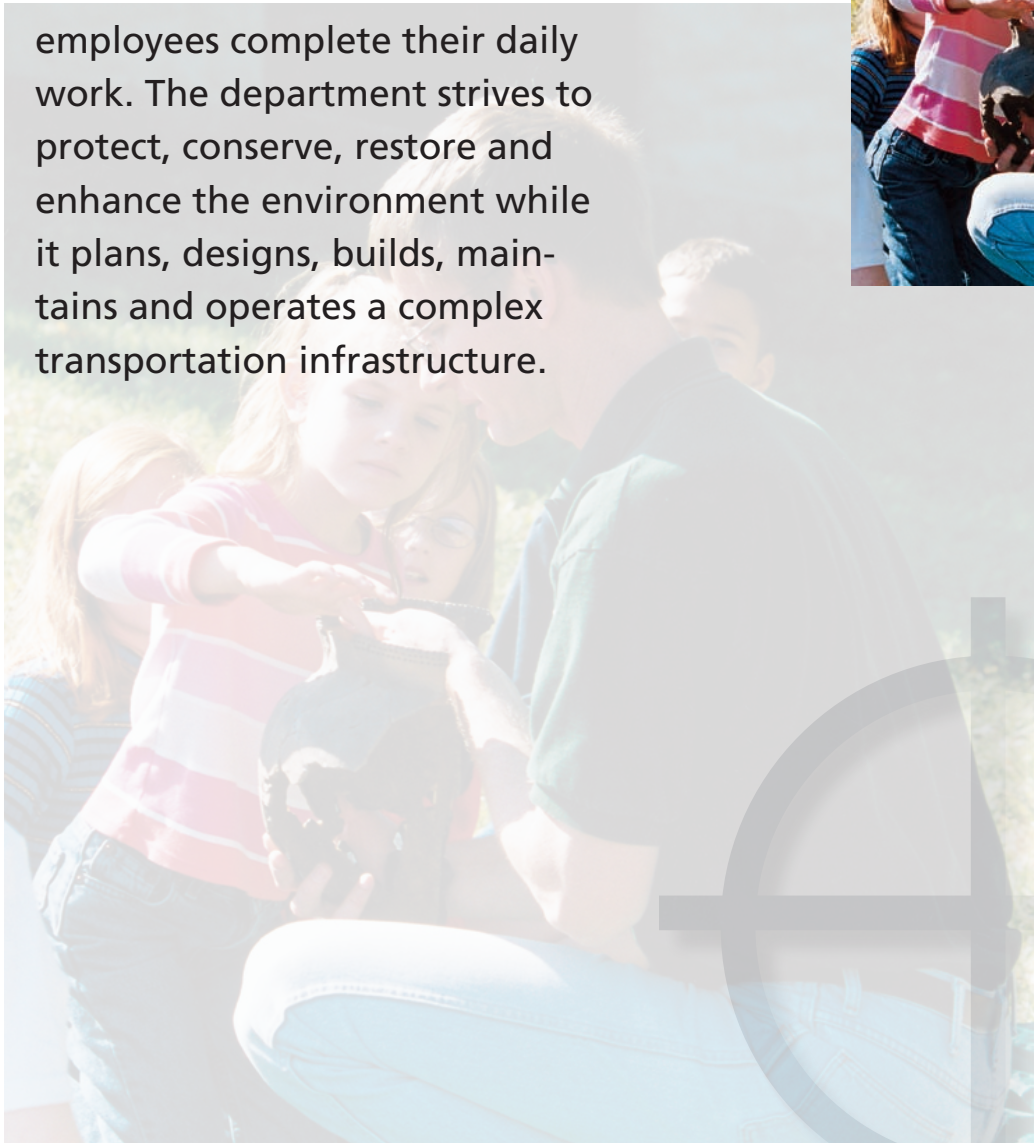

Environmentally Responsible

*Tangible Result Driver – Dave Nichols,
Director of Program Delivery*

MoDOT takes great pride in being a good steward of the environment, both in the construction and operation of Missouri's transportation system and in the manner in which its employees complete their daily work. The department strives to protect, conserve, restore and enhance the environment while it plans, designs, builds, maintains and operates a complex transportation infrastructure.



Environmentally Responsible

Percent of projects completed without environmental violation

Result Driver: Dave Nichols, Director of Program Delivery

Measurement Driver: Kathy Harvey, Technical Support Engineer

Purpose of the Measure:

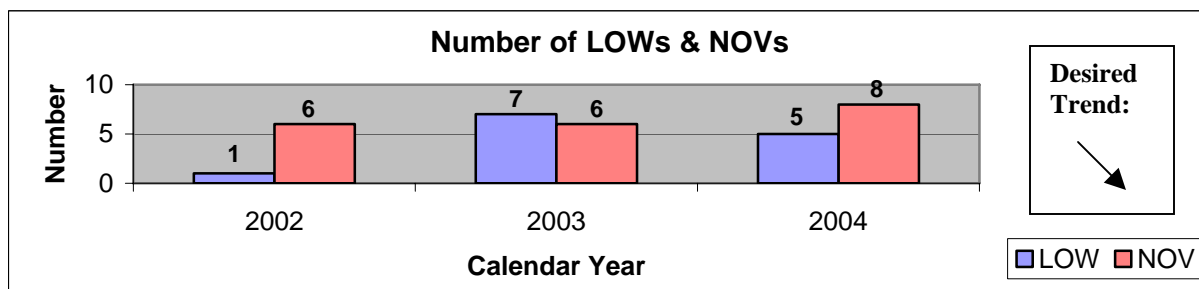
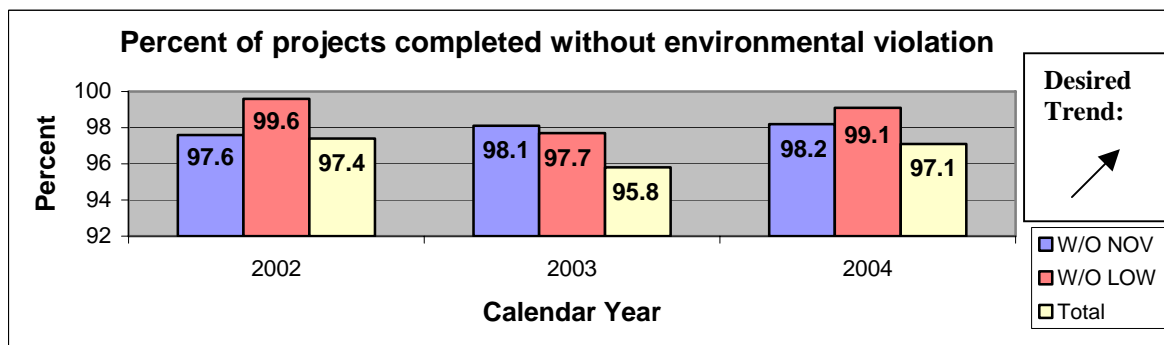
This measure tracks environmental violations. MoDOT projects must comply with several environmental laws and regulations. In order to be in compliance, MoDOT makes commitments throughout the project development process that must be carried forward during construction and maintenance. In addition, the various permits obtained for projects also contain specific requirements for compliance. If a violation is noted, it can result in either a Letter of Warning or a Notice of Violation to MoDOT.

Measurement and Data Collection:

Both LOWs and NOVs are written correspondence to MoDOT from regulatory agencies, which are tracked in a MoDOT database by project number. The report shown is by project with a list of violations received, which may span several years. The chart below is based on a calendar year of projects reported to be completed during that year and the number of violations received.

Improvement Status:

The graph for the past three years shows a relatively level trend line. However, based on a few serious violations received in 2004, the department implemented several strategies to achieve a possible decrease in violations this calendar year. Additionally, staff is conducting national research to determine if an appropriate benchmark state exists.



Environmentally Responsible

Number of projects on which MoDOT protects or restores sensitive species or habitat

Result Driver: Dave Nichols, Director of Program Delivery

Measurement Driver: Kathy Harvey, Technical Support Engineer

Purpose of the Measure:

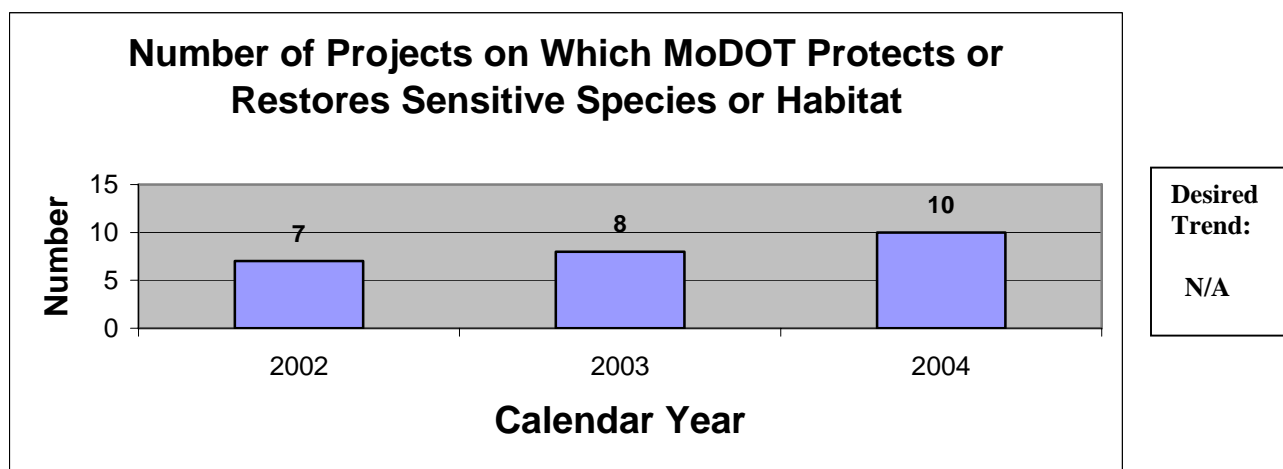
Missouri is home to many rare species of plants and animals, some of which are on the federal endangered species list. The Endangered Species Act of 1973 (as amended) prohibits harm or harassment of these species. Avoiding or minimizing harm to these species and protecting or restoring their habitat is a fundamental obligation of this organization. Avoidance and/or protection is the first goal of our efforts, but restoration is the minimum acceptable result.

Measurement and Data Collection:

This measure is tracked annually by calendar year. On all MoDOT projects, the department investigates and informs the US Fish and Wildlife Service of any activity in the vicinity of a known threatened or endangered species or critical habitat. Through this consultation with them, primarily through letters, MoDOT has the data to report on this measure. Because this measure focuses on projects that protect or restore sensitive habitats that could not initially be avoided, many MoDOT projects are not included in this data.

Improvement Status:

There is no desired trend with this measure; the number reported will fluctuate depending on our program each year, type of projects being constructed, location and just the ability to make adjustments to avoid impact on sensitive species or habitat. It can be assumed that as MoDOT's program increases the number will go up.



Environmentally Responsible

Percent of air quality days that meet Environmental Protection Agency standards by metropolitan area

Result Driver: Dave Nichols, Director of Program Delivery

Measurement Driver: Machele Watkins, Transportation Planning Director

Purpose of the Measure:

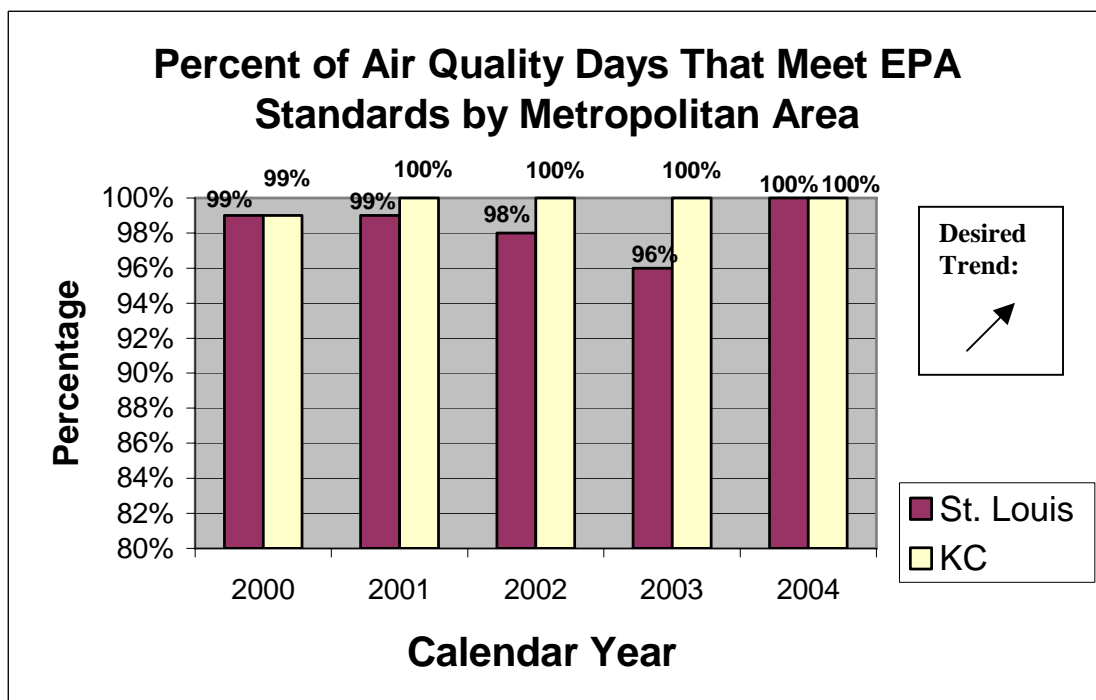
This measure tracks MoDOT's role in improving the air quality of Missouri's metro areas. The Environmental Protection Agency approves state plans to improve air quality. MoDOT makes every effort to design and build roads that meet air quality standards and do not violate the EPA-approved plans.

Measurement and Data Collection:

EPA establishes several air quality standards for the United States. The ground level ozone standard affects Missouri. Ozone readings are collected in Kansas City and St. Louis during the ozone season – April through October. The data contained in the table below reflects the percentage of days, by metro area, that met the EPA's ground level ozone standard.

Improvement Status:

MoDOT's efforts coupled with milder than normal weather in 2004 contributed to 100% positive air quality days as measured by EPA standards. Changes in EPA standards and warmer than normal weather in the first half of the ozone season could contribute to a smaller percentage of positive air quality days in 2005.



Environmentally Responsible

Percent of alternative fuel consumed

Result Driver: Dave Nichols, Director of Program Delivery

Measurement Driver: Dave DeWitt, Deputy Administrative Officer

Purpose of the Measure:

This measure tracks the use of alternative fuels. It shows MoDOT's contribution toward environmental responsibility and conservation of resources.

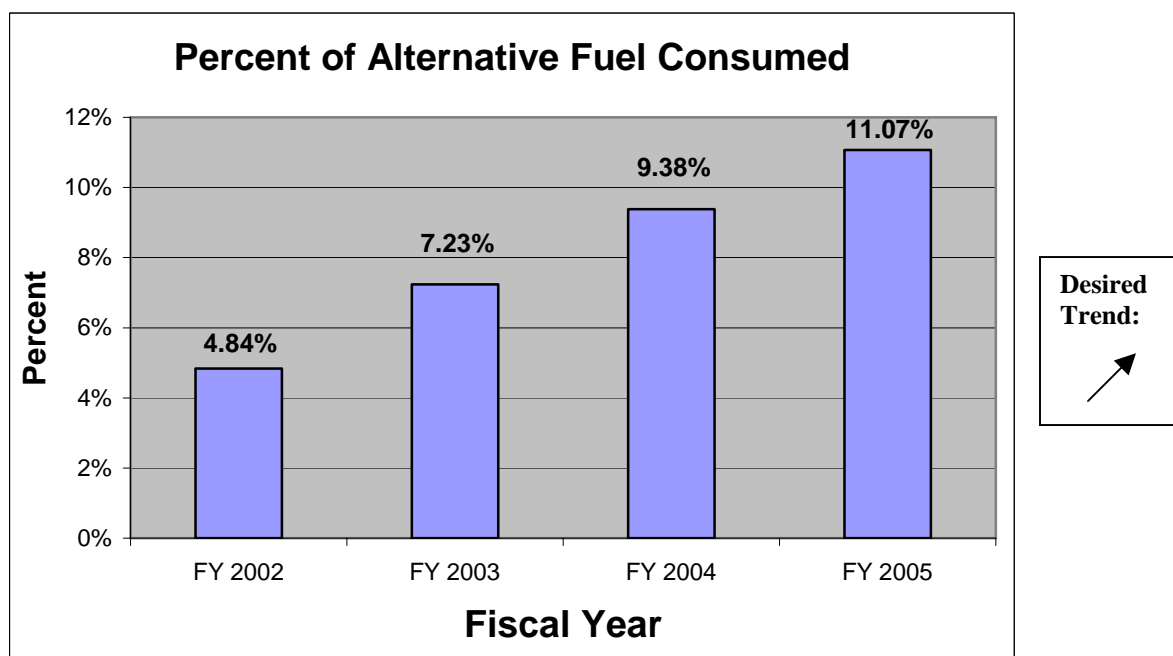
Measurement and Data Collection:

Alternative fuel is E-85 and biodiesel. When a user pumps fuel into a MoDOT vehicle or piece of equipment, that usage by gallon and by fuel type is captured in the SAMII system. Reports are generated to extract the number of gallons used from that system.

Improvement Status:

MoDOT has had four consecutive years of increases in the amount of alternative fuel consumed. In fiscal year 2005, MoDOT consumed 11.07 percent of its total fuel usage in alternative fuels compared to 4.84 percent in fiscal year 2002, in effect doubling usage in the last three years.

In 2002, MoDOT began requesting bids to acquire more alternative fueled engines on light and heavy-duty pickups, vans and SUVs. Currently the department operates two E-85 bulk fuel stations and is planning to install others. MoDOT's exclusive use of biodiesel in the St. Louis district has helped that area to improve its air quality. The department plans to significantly expand its use of biodiesel as it becomes more available.



Environmentally Responsible

Number of historic resources avoided or protected as compared to those mitigated

Result Driver: Dave Nichols, Director of Program Delivery

Measurement Driver: Bob Reeder, Historic Preservation Coordinator

Purpose of the Measure:

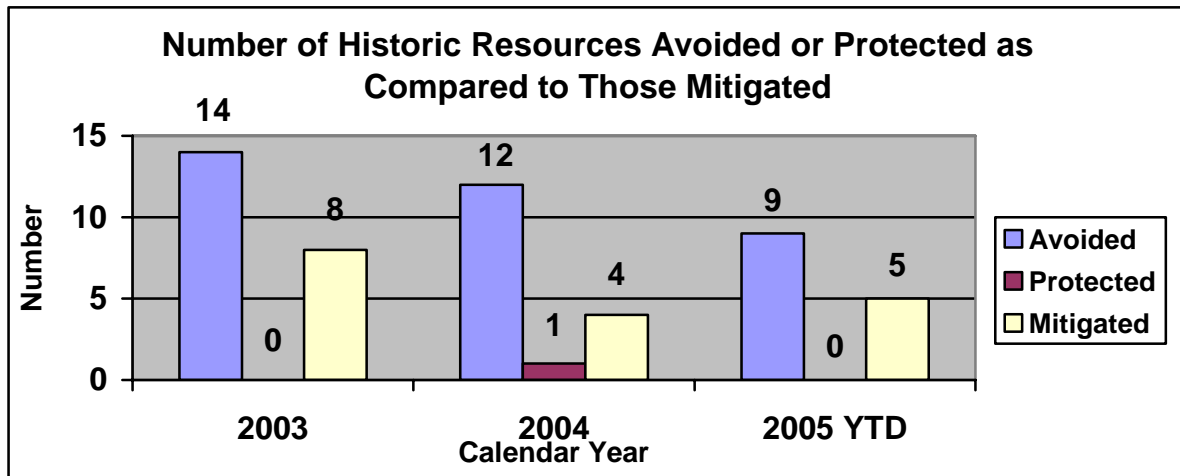
Federal historic preservation laws require federally-funded projects to avoid or mitigate project impacts to historic buildings and bridges whenever feasible. Establishing and maintaining local and public support for our projects also requires MoDOT to avoid or save historic resources, or mitigate project impacts to these resources since the resources often are highly visible, well known, and may be important sources of pride and historical identity for local communities and groups. Historic resources may be listed on state and national registers and their status tracked by state and national historic preservation advocacy groups; project impacts to these resources can bring adverse local, state and national attention to the project and the agency overall.

Measurement and Data Collection:

Data collection begins at approved Conceptual Plans stage. As preliminary plans, right of way plans and final plans are prepared by the district, the department staff tracks the number of historic resources in the project footprint and the number of times we successfully consult with the district to make changes to the plans to avoid or protect these resources versus the number of resources for which MoDOT has to mitigate. The data will only reflect historic resources that are considered by projects after the conceptual plan stage. Historic resources identified in project scoping but avoided through redesign at stage of project development will not be included in the count. Avoidance of historic resources through redesign or shifting of alignments during the National Environmental Policy Act planning process is not reflected.

Improvement Status:

The information for year 2005 is for the first two quarters of calendar year 2005 only. As shown, MoDOT projects let during the first two quarters of 2005 successfully avoided or protected nine of the 14 (or 64 percent) historic resources encountered. This proportion is similar to the 2003 results when 14 of 22 (64 percent) historic resources were avoided or protected; however, it is lower than in 2004 when 13 of 17 (77 percent) historic resources were avoided or protected. Although the 2005 results are for just the first half of the year, it appears that by the end of the year the 2005 projects will have considered more historic resources than were considered by the 2003 or 2004 projects. The desired overall trend is for the proportion of mitigated resources to decrease as MoDOT becomes more effective at avoiding and protecting historic resources. MoDOT will continue to have to mitigate some historic resources as long as structurally deficient bridges require substantial repair or replacement. For example, four of the five historic resources mitigated in 2005 thus far have been bridges.



**Desired
Trend:**

N/A

Environmentally Responsible

Ratio of acres of wetlands created compared to the number of acres of wetlands impacted

Result Driver: Dave Nichols, Director of Program Delivery

Measurement Driver: Gayle Unruh, Wetland Coordinator

Purpose of the Measure:

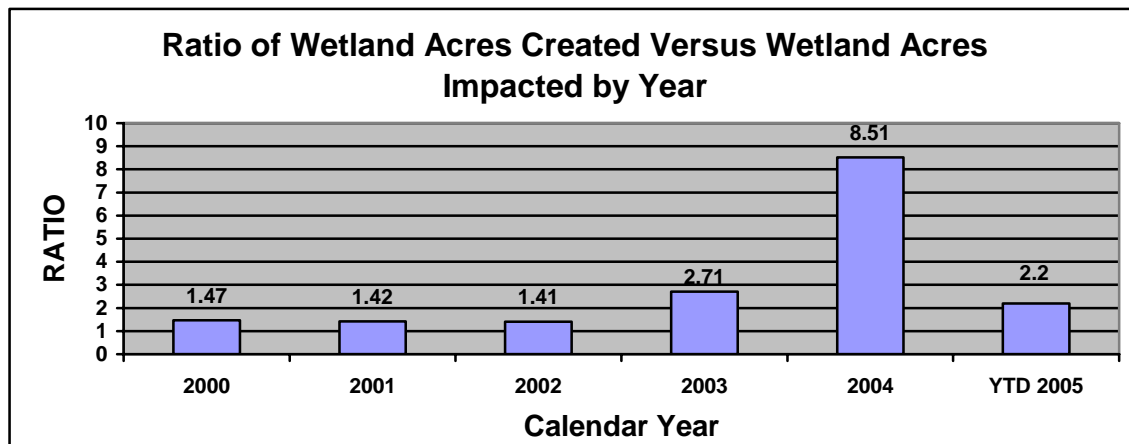
Wetlands are a valuable resource in Missouri, having beneficial functions such as wildlife habitat, flood storage and water quality improvement. In addition to these benefits, it is required in the Clean Water Act that impacts to wetlands be avoided or minimized or that wetlands be recreated when a wetland is destroyed during a transportation project. MoDOT has unavoidable impacts on wetlands and thus recreates wetlands. The national goal, set by the FHWA, for recreating wetland is to construct 1.5 acres of wetland for every 1.0 acre of wetland impacted. Recreating wetlands at this ratio helps to offset the lost beneficial functions during the time it takes for a wetland to develop, which in the case of forested wetlands can be a considerable time period. This measure helps ensure that MoDOT is doing its part to maintain wetlands in Missouri.

Measurement and Data Collection:

Acres of impact will be taken from Clean Water Act permits and will be listed by project. Acres of wetland construction will be taken from roadway design plans or mapped wetland areas recreated by MoDOT, again listed by project. Impacts may occur in a different year from the mitigation, so for the purposes of this measure, the timeframe for the reporting is when the mitigation construction is complete based on a calendar year.

Improvement Status:

MoDOT has improved for the first half of 2005 by approaching the level of replacing wetlands at a rate of 1.5 to 1 much more closely than last year's ratio of 8.51 to 1. Last year's ratio reflects a mistake that was made in the construction of a wetland site. Since that mistake was made, the department has trained construction inspectors and resident engineers. The training targeted improving the interpretation and attention paid to the wetland development plans.



Desired Trend:



Environmentally Responsible

Number of trees planted compared to number of acres cleared

Result Driver: Dave Nichols, Director of Program Delivery

Measurement Driver: Jerry Hirtz, Technical Support Engineer, Construction & Materials

Purpose of the Measure:

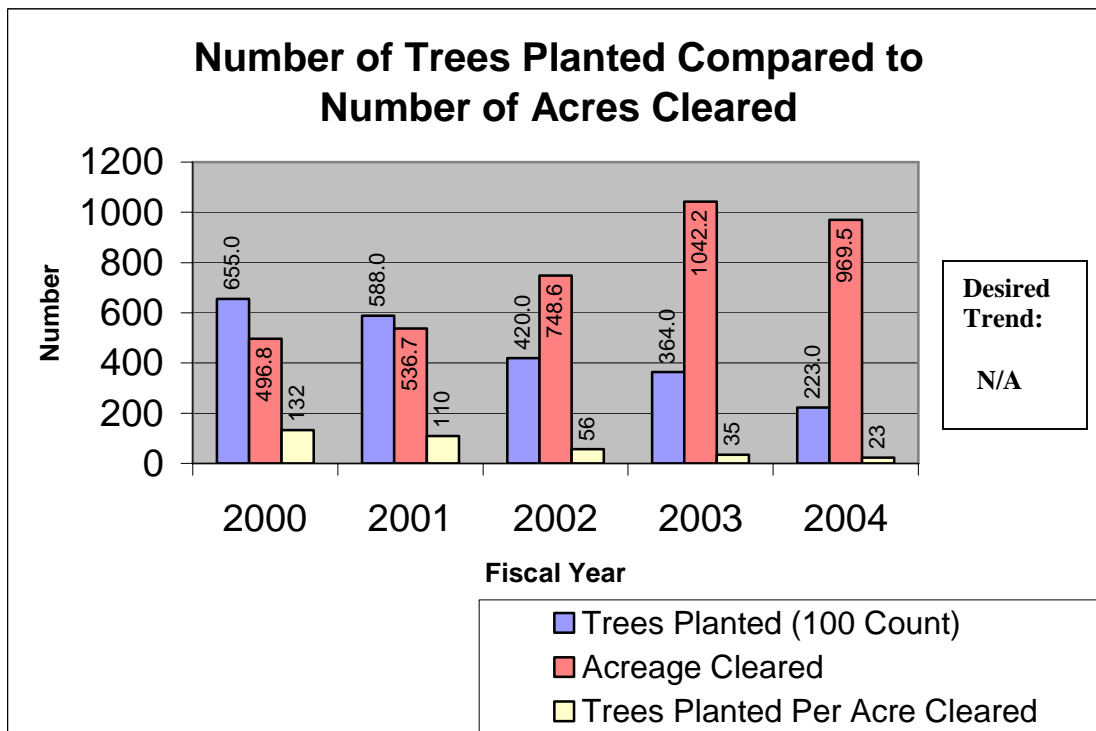
This measure tracks MoDOT's effort to replace trees removed as a result of clearing operations on its construction projects.

Measurement and Data Collection:

MoDOT has committed to plant 2 trees for each 6" or larger tree removed by construction operations. MoDOT documents acreage cleared through its contract administration processes and a record is maintained of trees ordered each year for spring planting. In the future, this measure will be amended to compare trees planted to trees removed as the data becomes available.

Improvement Status:

Over the past several years, areas cleared for construction have steadily increased and the number of trees planted has decreased. Close monitoring has allowed staff to better assess how MoDOT is meeting its tree replacement obligations and should improve the previous deficiency.



Environmentally Responsible

Number of tons of recycled/waste materials used in construction projects

Result Driver: Dave Nichols, Director of Program Delivery

Measurement Driver: Joe Schroer, Field Materials Engineer

Purpose of the Measure:

This measure tracks MoDOT's efforts to be environmentally conscious while being fiscally responsible through the use of recycled/waste material when applicable.

Measurement and Data Collection:

The number of tons of recycled/waste material used in construction projects is measured through MoDOT's construction management database which tracks material incorporated into projects. Data is collected on an annual basis.

Improvement Status:

Available data from 2004 and through the end of June 2005 has been included. The data for 2005 shows that approximately the same amount of recycled/waste material will be incorporated into projects during 2005 as in 2004. Project specifications have been revised to allow a greater amount of recycled materials in asphalt mixtures.

